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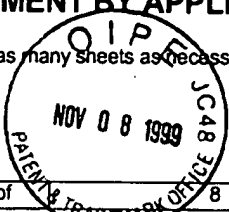

 PTO/SB/08A (10-96)
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Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)



Complete If Known

Application Number	09/235,875
Filing Date	January 22, 1999
First Named Inventor	Lara Madison
Group Art Unit	4244 1638
Examiner Name	
Attorney Docket Number	MBX 020

Sheet 1 of 8

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	US Patent Document		Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
AJN		4,826,493		Martini, et al.	05-02-1989	
		4,876,331		Doi	10-24-1989	
		4,900,299		Webb	02-13-1990	
		4,910,145		Holmes, et al.	03-20-1990	
		4,968,611		Traussnig, et al.	11-06-1990	
		5,213,976		Blauhut, et al.	05-25-1993	
		5,225,227		Yalpani	07-06-1993	
		5,229,158		Yalpani	07-20-1993	
		5,245,023		Peoples, et al.	09-14-1993	
		5,266,422		Reusch, et al.	11-30-1993	
		5,286,842		Kimura	02-15-1994	
		5,292,860		Shiotani, et al.	03-08-1994	
		5,461,139		Gonda, et al.	10-24-1995	
		5,480,794		Peoples, et al.	01-02-1996	
		5,512,669		Peoples, et al.	04-30-1996	
		5,516,883		Hori, et al.	05-14-1996	
		5,534,432		Peoples, et al.	07-09-1996	
		5,563,239		Hubbs, et al.	10-08-1996	
AJN		5,849,894		Clemente, et al.	12-15-1998	

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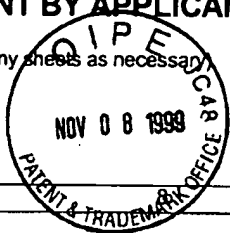


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FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Office ²	Number ³	Kind Code ⁴ (if known)			
ATN	✓	BR	9302312-0	A	COPERSUC	02-07-1995	
		CA	2,006,508		Xerox Corp.	08-27-1990	
		DE	195 33 459	C1	Buna Sow Leuna Olefinverbund GmbH	11-28-1996	
		JP	7-79788		Toyo Soda KK	03-28-1995	
		JP	7-135985		Mitsubishi Gas Chem. Co.	05-30-1995	
		WO	91/13207	A1	Pulp and Paper Research Institute of Canada	09-05-1991	
		WO	92/09210	A1	The Nutrasweet Company	06-11-1992	
		WO	92/09211	A1	The Nutrasweet Company	06-11-1992	
		WO	93/23554	A1	Buna AG	11-25-1993	
		WO	95/15260	A1	Zeneca Limited	06-08-1995	
		WO	95/20614	A1	The Procter & Gamble Co.	08-03-1995	
		WO	95/20615	A1	The Procter & Gamble Co.	08-03-1995	
		WO	95/20621	A1	The Procter & Gamble Co.	08-03-1995	
		WO	96/00263	A1	Onderzoek En Ontwikkeling Noord Nederland	01-04-1996	
		WO	96/17369	A1	Cookson Group, PLC	06-06-1996	
ATN		WO	97/08931	A1	Buna Sow Leuna Olefinverbund GMBH	03-13-1997	

Examine Signature	<i>Amy Neh</i>	Date Considered	10/6/00
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OTHER ART - NON PATENT LITERATURE DOCUMENTS			
Examiner's Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ⁴
ATN		ABE, et al., "Biosynthesis from gluconate of a random copolyester consisting of 3-hydroxybutyrate and medium-chain-length 3-hydroxyalkanoates by <i>Pseudomonas</i> sp. 61-3," <i>Int. J. Biol. Macromol.</i> 16:115-19 (1994).	
		AGOSTINI, et al., "Synthesis and Characterization of Poly-β-Hydroxybutyrate. I. Synthesis of Crystalline DL Poly-β-Hydroxybutyrate from DL- β-Butyrolactone," <i>Polym. Sci.</i> 9:2775-87 (1971).	
		AMOS & MCINERNEY, "Composition of poly-β-hydroxyalkanoate from <i>Syntrophomonas wolfei</i> grown on unsaturated fatty acid substrates," <i>Arch. Microbiol.</i> 155:103-06 (1991).	
		BOUQUIN, et al., "Resistance to trifluoroperazine, a calmodulin inhibitor, maps to the <i>fabD</i> locus in <i>Escherichia coli</i> ," <i>Mol Gen Genet.</i> 246(5):628-37 (1995).	
		BOYNTON, et al., "Cloning, sequencing, and expression of clustered genes encoding beta-hydroxybutyryl-coenzyme A (CoA) dehydrogenase, crotonase, and butyryl-CoA dehydrogenase from <i>Clostridium acetobutylicum</i> ATCC 824," <i>J Bacteriol.</i> 178(11):3015-24 (1996).	
		BRANDL, et al., "Ability of the phototrophic bacterium <i>Rhodospirillum rubrum</i> to produce various poly (beta-hydroxyalkanoates): potential sources for biodegradable polyesters," <i>Int. J. Biol. Macromol.</i> 11:49-55 (1989).	
		BYROM, "Miscellaneous Biomaterials" in <i>Biomaterials</i> (D. Byrom, ed.) pp. 333-59 (MacMillan Publishers, London 1991).	
		CABALLERO, et al., "Biosynthesis and characterization of hydroxybutyrate-hydroxycaproate copolymers," <i>Int J Biol Macromol.</i> 17(2):86-92 (1995).	
		CLARK & ROD, "Regulatory mutations that allow the growth of <i>Escherichia coli</i> on butanol as carbon source," <i>J Mol Evol.</i> 25(2):151-58 (1987).	
ATN		DE SMET, et al., "Characterization of intracellular inclusions formed by <i>Pseudomonas oleovorans</i> during growth on octane," <i>J. Bacteriol.</i> 154:870-78 (1983).	

Examiner's Signature	<i>Amy Neh</i>	Date Considered	10/6/00
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		First Named Inventor	Lara Madison
		Group Art Unit	4741 1638
		Examiner Name	
Sheet 4	8	Attorney Docket Number	MBX 020

OTHER ART - NON PATENT LITERATURE DOCUMENTS			
Examiner's Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
ATN	DOI, et al.,	"Microbial synthesis and characterization of poly(3-hydroxybutyrate-co-3-hydroxyhexanoate)," <i>Macromolecules</i> 28:4822-4828 (1995).	
	DONG & STAMS,	"Localization of the enzymes involved in H ₂ and formate metabolism in <i>Syntrophospira bryantii</i> ," <i>Antonie Van Leeuwenhoek</i> . 67(4):345-50 (1995).	
	DUBOIS, et al.,	"Macromolecular Engineering of Polylactones and Polylactides. 12. Study of the Depolymerization Reactions of Poly (ε-caprolactone) with Functional Aluminum Alkoxide End Groups," <i>Macromolecules</i> 26:4407-12 (1993).	
	ENGEL & MASSEY,	"The purification and properties of butyryl-coenzyme A dehydrogenase from <i>Peptostreptococcus elsdenii</i> ," <i>Biochem J.</i> 125(3):879-87 (1971).	
	FUKUI & DOI,	"Cloning and analysis of the poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) biosynthesis genes of <i>Aeromonas caviae</i> ," <i>J. Bacteriol.</i> 179(15):4821-30 (1997).	
	FUKUI, et al.,	"Enzymatic synthesis of poly-beta-hydroxybutyrate in <i>Zoogloea ramigera</i> ," <i>Arch Microbiol.</i> 110(23):149-56 (1976).	
	GEORGE & SMIBERT,	"Fumarate reduction and product formation by the Reiter strain of <i>Treponema phagedenis</i> ," <i>J Bacteriol.</i> 152(3):1049-59 (1982).	
	GROSS, et al.,	"Polymerization of β-Monosubstituted-β-propiolactones Using Trialkylaluminum-Water Catalytic Systems and Polymer Characterization," <i>Macromolecules</i> 21:2657-68 (1988).	
	HALL, et. al.,	"Cloning of the <i>Nocardia corallina</i> polyhydroxyalkanoate synthase gene and production of poly-(3-hydroxybutyrate-co-3-hydroxyhexanoate) and poly-(3-hydroxyvalerate-co-3-hydroxyheptanoate)," <i>Can. J. Microbiol.</i> 44(7):687-91 (1998).	
ATN	HARTEL & BUCKEL,	"Sodium ion-dependent hydrogen production in <i>Acidaminococcus fermentans</i> ," <i>Arch Microbiol.</i> 166(5):350-6 (1996).	

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ATN		HAYWOOD, et al., "Characterization of two 3-ketothiolases possessing differing substrate specificities in the polyhydroxyalkanoate synthesizing organism <i>Alcaligenes eutrophus</i> ," <i>FEMS Microbiol. Lett.</i> 52:91-96 (1988).	
		HAYWOOD, et al., "The importance of PHB-synthase substrate specificity in polyhydroxyalkanoate synthesis by <i>Alcaligenes eutrophus</i> ," <i>FEMS Microbiol. Lett.</i> 57:1-6 (1989).	
		HOCKING & MARCHESSAULT, "Biopolyesters" in <i>Chemistry and Technology of Biodegradable Polymers</i> , (Griffin, ed.) pp. 48-96, Chapman and Hall:London, 1994.	
		HOCKING & MARCHESSAULT, "Syndiotactic poly((R,S)-3-hydroxybutyrate) isolated from methylaluminum-catalyzed polymerization," <i>Polym. Bull.</i> 30:163-70 (1993).	
		HOLMES, "Biologically Produced (R)-3-hydroxyalkanoate Polymers and Copolymers," in <i>Developments in Crystalline Polymers</i> (D.C. Bassett, Ed.), pp. 1-65, Elsevier:London, 1988.	
		HORI, et al., "Ring-Opening Copolymerization of Optically Active 3-Butyrolactone with Several Lactones Catalyzed by Distannoxane Complexes: Synthesis of New Biodegradable Polyesters," <i>Macromolecules</i> 26:4388-90 (1993).	
		HORI, et al., "Ring-Opening Polymerization of optically Active 3-Butyrolactone Using Distannoxane Catalysts: Synthesis of High Molecular Weight Poly(3-hydroxybutyrate)," <i>Macromolecules</i> 26:5533-34 (1993).	
		HUISMAN, et al., "Synthesis of poly-3-hydroxyalkanoates is a common feature of fluorescent pseudomonads," <i>Appl. Environ. Microbiol.</i> 55(8):1949-54 (1989).	
		IMAMURA, et al., "Purification of the multienzyme complex for fatty acid oxidation from <i>Pseudomonas fragi</i> and reconstitution of the fatty acid oxidation system," <i>J. Biochem. (Tokyo)</i> . 107(2):184-89 (1990).	
ATN		JESUDASON & MARCHESSAULT, "Synthetic Poly((R,S)-3-hydroxyalkanoates) with Butyl and Hexyl Side Chains," <i>Macromolecules</i> 27:2595-602 (1994).	

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ATN	1	KATO, et al., "Production of a novel copolyester of 3-hydroxybutyric acid with a medium-chain-length 3-hydroxyalkanoic acids by <i>Pseudomonas</i> sp. 61-3 from sugars," <i>Appl. Microbiol. Biotechnol.</i> 45:363-70 (1996).	
	2	KEMNITZER, et al., "Preparation of predominantly Syndiotactic Poly(β -hydroxybutyrate) by the Tributyltin Methoxide Catalyzed Ring-Opening Polymerization of racemic β -Butyrolactone," <i>Macromolecules</i> 26:1221-29 (1993).	
	3	LAFFERTY, et al., "Microbial Production of Poly-b-hydroxybutyric acid" in <i>Biotechnology</i> (Rehm & Reed, eds.), pp. 135-76, Verlagsgesellschaft: Weinheim, 1988.	
	4	LE BORGNE & SPASSKY, "Stereoelective polymerization of β -butyrolactone," <i>Polymer</i> 30:2312-19 (1989).	
	5	LEE, et al., "Biosynthesis of copolyesters consisting of 3-hydroxybutyric acid and medium chain length 3-hydroxyalkanoic acids from 1,3-butanediol or from 3-hydroxybutyrate by <i>Pseudomonas</i> sp. A33," <i>Appl. Microbiol. Biotechnol.</i> 42:901-09 (1995).	
	6	MADAN, et al., "Purification and properties of NADP-dependent L(+) 3-hydroxybutyryl-CoA dehydrogenase from <i>Clostridium kluyveri</i> ," <i>Eur. J. Biochem.</i> 32(1):51-56 (1973).	
	7	MARTINEZ, et al., "pACYC184-derived cloning vectors containing the multiple cloning site and <i>lacZ</i> reporter gene of pUC8/9 and pUC18/19 plasmids," <i>Gene</i> 68:159-62 (1988).	
	8	MILLER & JENESE, "Enzymology of butyrate formation by <i>Butyrivibrio fibrisolvens</i> ," <i>J Bacteriol.</i> 138(1):99-104 (1979).	
	9	MITOMO, et al., "Fractional and structural change of microbial poly(3-hydroxybutyrate-4-hydroxybutyrate)," <i>Reports on Progress in Polymer Physics in Japan</i> , 37:671-72 (1994).	
ATN	10	MULLANY, et al., "Genes encoding homologues of three consecutive enzymes in the butyrate/butanol-producing pathway of <i>Clostridium acetobutylicum</i> are clustered on the <i>Clostridium difficile</i> chromosome," <i>FEMS Microbiol. Lett.</i> 124(1):61-7 (1994).	

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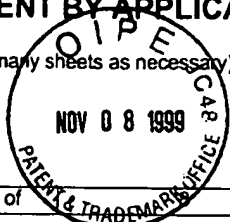


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ADN		MULLER & SEEBACH, "Poly(hydroxyalkanoates): A Fifth Class of Physiologically Important Organic Biopolymers," <i>Angew. Chem. Int. Ed. Engl.</i> 32: 477-502 (1993).	
		PIEPER & STEINBUCHER, "Identification, cloning and sequence analysis of the poly(3-hydroxyalkanoic acid) synthase gene of the gram-positive bacterium <i>Rhodococcus ruber</i> ," <i>FEMS Microbiol. Lett.</i> 75(1):73-9 (1992).	
		PLOUX, et al., "The NADPH-linked acetoacetyl-CoA reductase from <i>Zoogloea ramigera</i> . Characterization and mechanistic studies of the cloned enzyme over-produced in <i>Escherichia coli</i> ," <i>Eur. J. Biochem.</i> 174(1):177-82 (1988).	
		PRAMANIK, et al., "Five different enzymatic activities are associated with the multienzyme complex of fatty acid oxidation from <i>Escherichia coli</i> ," <i>J. Bacteriol.</i> 137(1):469-73 (1979).	
		SAMBROOK, et. al., in <i>Molecular Cloning, a laboratory manual</i> , (2nd Ed.), Cold Spring Harbor Laboratory Press: Cold Spring Harbor, NY, 1992.	
		SHIMAMURA, et al., "Physical properties and biodegradability of microbial poly(3-hydroxybutyrate-co-3-hydroxyhexanoate)," <i>Macromolecules</i> 27:878-80 (1994).	
		STEINBUCHER & VALENTIN, "Diversity of bacterial polyhydroxyalkanoic acids," <i>FEMS Microbiol. Lett.</i> 128:219-28 (1995).	
		STEINBUCHER & WIESE, "A <i>Pseudomonas</i> strain accumulating polyesters of 3-hydroxybutyric acid and medium-chain-length 3-hydroxyalkanoic acids," <i>Appl. Microbiol. Biotechnol.</i> 37:691-97 (1992).	
		STEINBUCHER, "Polyhydroxyalkanoic Acids" in <i>Biomaterials</i> (Byrom, ed.), pp. 123-213, MacMillan Publishers: London, 1991.	
ADN		TANAHASHI & DOI, "Thermal Properties and Stereoregularity of Poly(3-hydroxybutyrate) Prepared from optically Active β-Butyrolactone with a Zinc-Based Catalyst," <i>Macromolecules</i> 24:5732-33 (1991).	

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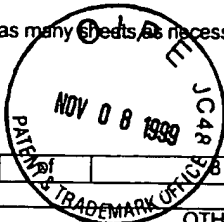


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		First Named Inventor	Lara Madison
		Group Art Unit	4711 1638
		Examiner Name	
Sheet 8		Attorney Docket Number	MBX 020



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Examiner's Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
ATN	r	WILLIAMSON & ENGEL, "Butyryl-CoA dehydrogenase from <i>Megasphaera elsdenii</i> . Specificity of the catalytic reaction," <i>Biochem J.</i> 218(2):521-9 (1984).	
ATN	r	XIE, et al., "Ring-opening Polymerization of β -butyrolactone by Thermophilic Lipases," <i>Macromolecules</i> 30:6997-98 (1997).	
ATN	*	YARLETT, et al., "Butyrate formation from glucose by the rumen protozoon <i>Dasytricha ruminantium</i> ," <i>Biochem. J.</i> 228(1):187-92 (1985).	

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				Filing Date	January 22, 1999
				First Named Inventor	Lara Madison
				Group Art Unit	1638
				Examiner Name	A. Nelson
				Attorney Docket Number	MBX 020
Sheet	2	of	2		

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Application Number

09/235,876

Filing Date

January 22, 1999

First Named Inventor

Lara Madison

Group Art Unit

1638

Examiner Name

A. Nelson

Attorney Docket Number

MBX 020

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